

Leigh F. Callahan, PhD

Curriculum Vitae

Office Address:

Thurston Arthritis Research Center
3330 Thurston Building, CB# 7280
University of North Carolina
Chapel Hill, NC 27599-7280

Personal:

EDUCATION

May 1979

University of North Carolina, Chapel Hill NC 27599
Degree: B.S., Radiologic Science

December 1992

Vanderbilt University, Nashville, TN 37232
Degree: PhD, Public Policy

EMPLOYMENT HISTORY

July 1999-Present

Research Associate Professor, Department of Medicine and Orthopaedics
Adjunct Associate Professor, Department of Epidemiology, University of
North Carolina, Chapel Hill, NC

October 1998-present

Director, Numerical Sciences Core, Thurston Arthritis Research Center,
University of North Carolina, Chapel Hill, NC

January 1997-July 1999

Research Assistant Professor, Department of Medicine, University of
North Carolina, Chapel Hill, NC

October 1996-present

Research Fellow, Cecil B. Sheps Center for Health Services Research,
University of North Carolina, Chapel Hill, NC

September 1995-June 2000

Associate Director, Thurston Arthritis Research Center

September 1995-June 1999

Adjunct Assistant Professor, Department of Epidemiology, University of
North Carolina, Chapel Hill, NC

May 1993-September 1995

Epidemiologist, Aging Studies Branch, Atlanta, GA
Centers for Disease Control and Prevention

January 1983-May 1993

Research Associate, Division of Rheumatology and Immunology,
Vanderbilt University, Nashville, TN

March 1981-December 1982

Research Assistant, Division of Rheumatology and Immunology,
Vanderbilt University, Nashville, TN

September 1979-February 1981

Research Assistant, Wistar Institute, University of Pennsylvania,
Philadelphia, PA

PROFESSIONAL SOCIETIES

American College of Rheumatology

New Patient Materials Committee, 1992-1993

Behavioral Rheumatology Study Club, Chairperson, 1994-1996

Market Research Committee, 1994-1996

Health Services Research Abstract Review Panel, 1995

Committee on Journal Publications, 1998-1999

Committee on Research Ad Hoc Committee on Patient Based Research, 1999

Blue Ribbon Committee on New Therapies, 1999-2000

Subcommittee on Clinical Research- Ad Hoc Committee on National Database /Registry, 2000

Association of Rheumatology Health Professionals (formerly Arthritis Health Professions Association)

National President, 1990

First Vice-President, 1989

Secretary/Treasurer, 1987-1988

Financial Development Committee, Chairperson, 1987-1988

Executive Committee, 1987-1991

Governing Board, 1985-1992

Publications Committee

♦ Member, 1984-1985

♦ Chairperson, 1985-1986

Nominating Committee

♦ Member, 1989-1990, 2000

♦ Chairperson, 1991

Journal Task Force, 1986

Health Services Research Abstract Review Panel, 1987-1989, 1994, 2000

Epidemiology Abstract Review Panel, 1991-1993, 1996-1998

Planning Committee, 1985-1991, 1995

Research Task Force, 1991-1992

♦ Chairperson, 1992

Awards Selection Subcommittee, 1995

Arthritis Care and Research Subcommittee, 1995-1999

Advocacy Task Force, 1995-1996

Slide Collection Review Task Force, 1996

Southeast Region

♦ Council Chair, 1987-1988

♦ Executive Committee, 1986-1989

♦ Regional Correspondent to AHPA Newsletter, 1985-1986

Nominating Committee

♦ Member, 1985-1986

♦ Chairperson, 1989

Program Committee, 1985-1987

♦ Member, 1985-1986

♦ Chairperson, 1986-1987

American Public Health Association

Association for Health Services Research

American Association of Orthopaedic Surgery

- ◆ Women's Health Issues Research Agenda Panel, Co-Chair, 2000

Gerontological Society of America

- ◆ Behavioral and Social Sciences Abstract Review Panel, 1987

Society for Epidemiologic Research

PROFESSIONAL SERVICES

Reviewer:

American Journal of Public Health
Annals of Behavioral Medicine
Annals of the Rheumatic Diseases
Arthritis and Rheumatism
Arthritis Care and Research
Arthritis Foundation Brochures
British Journal of Rheumatology
Bulletin of Rheumatic Diseases
Health Education Quarterly
Health Services Research
Journal of the American Medical Association
Journal of Clinical Epidemiology
Journal of Gerontology
Psychosomatics
Journal of Managed Care
Journal of Rheumatology
Rheumatology
Scandinavian Journal of Rheumatology
Social Science and Medicine
Southern Medical Journal
Spine
American Psychological Association Book Chapter
Health Psychology
American Journal of Public Health
The Gerontologist

External Grant Referee:

National Institute of Arthritis Musculoskeletal and Skin Diseases (NIAMS), site visitor, Multipurpose Arthritis Center Renewal Application, University of California, San Francisco, CA, 1987.

National Institute of Arthritis Musculoskeletal and Skin Diseases (NIAMS) Special Emphasis Panel, MAMDC Review Committee, 1997

Arthritis Society of Canada, 1989,1991,1992,1994,1996,1997,1999

New York Arthritis Foundation Chapter AHP Research grants, 1993

National Arthritis Foundation Clinical Science Review Panel, 1993-1995

Northwestern University Multipurpose Arthritis and Musculoskeletal Diseases Center Development and Feasibility Project, 1996

University of Michigan Multipurpose Arthritis and Musculoskeletal Diseases Center Development and Feasibility Project, 1996

North American Rheumatoid Arthritis Consortium (NARAC), Consultant, 1998-2000

Board of Scientific Counselors, MAMDC, University of North Carolina, Chapel Hill, 1995

ARAMIS Steering Committee, 1987-1994

External Scientific Advisory Committee Member, The Hospital for Special Surgery, New York, NY, 1996

Carolina Speakers, 1998-2000

EDITORIAL BOARDS

Arthritis Care and Research

Editor, 1995-1999

Associate Editor, 1987-1994

Editorial Board, 2000

Rheumatoid Arthritis: Index and Reviews

Editorial Board, 1998-2000

Arthroscope

Thurston Arthritis Research Center Newsletter

Editor, 1996-present

Health Education Quarterly

Guest Editorial Board Member for supplement issue titled, "Health education in arthritis," Spring, 1993

The Gerontologist

Editorial Board, 2000

FELLOWSHIPS OR GRANTS

Arthritis Foundation

Traineeship Grant, 1986-1988

"Examination of Physician Capitation Packages in Terms of Rheumatoid Arthritis." Project in ARAMIS, NIH Grant AM 21393, Grant Renewal, funded 7/87-6/90. (Principal Investigator)

"Questionnaire and Functional Status Reports in Routine Rheumatologic Care." Project in ARAMIS, NIH Grant AM 21393, Grant Renewal, funded 7/87-6/90. (Co-investigator, Principal Investigator: Theodore Pincus, MD)

"Psychological Studies in Rheumatoid Arthritis and Fibrositis." Project in ARAMIS, NIH Grant AM 21393, Grant Renewal, funded 7/87-6/90. (Co-investigator, Principal Investigator: Theodore Pincus, MD)

"Socioeconomic and Comorbidity Effects in Rheumatoid Arthritis Patients." Projects in ARAMIS, NIH Grant AR 21393, Grant Renewal, funded 7/90-6-95. (Principal Investigator)

"Monitoring of Rheumatoid Arthritis Patients in Private Practice in Rheumatology Settings." Project in ARAMIS, NIH Grant AR 21393, Grant Renewal, funded 7/90-6/95. (Co-investigator, Principal Investigator: Theodore Pincus, MD)

Arthritis Foundation "Learned Helplessness and Education in Rheumatoid Arthritis Outcomes." New Investigator Award, 1993-1994

"10-year Health Status Outcomes in Rheumatoid Arthritis: The Role of Formal Education and Helplessness." Development Feasibility project in MAMDC Grant, University of North Carolina, Chapel Hill, funded 01/96-06/96. (Principal Investigator)

"Measuring Health Status During Clinical Care." Development and Feasibility Project in MAMDC Grant, University of North Carolina, Chapel Hill, funded 07/01/96-06/30/98. (Principal Investigator)

"Joint Inflammation, Damage and Outcomes over 5 and 10 years." Arthritis Foundation Clinical Science Grant, funded 07/01/96-06/30/99. (Co-investigator, Principal Investigator: ~~XXXXXXXXXX~~)

"Self-Management, Education and Outcomes in RA." E/E/HSR Project in MAMDC Grant, University of North Carolina, Chapel Hill, funded 07/01/98-06/30/02. (Principal Investigator)

"Examination of Individual Differences in the Experience of Pain." Development & Feasibility: Multipurpose Arthritis and Musculoskeletal Disease Center NUSCOR (Co-Investigator, Principal Investigator: ~~XXXXXXXXXX~~)

COMMITTEES

University of North Carolina –Chapel Hill

Operational Committee, Institute on Aging, University of North Carolina, 1997-1999
Spring Seminar Series Planning Committee, 1998

Health Care Epidemiology Program

Population-Based Health Research Capacity Focus Group

Womentor, Mentor for women undergraduate students, 1997-1999

Medical Student Mentor, 1999-2000

Advisory Board, North Carolina Program for Women's Health Research, 1999-2000

State of North Carolina Arthritis Action Plan Advisor

National

National Institute of Arthritis Musculoskeletal and Skin Diseases (NIAMS), National Research Plan-Health Services, Behavioral, and Education Research Panel Member, 1991

National Arthritis Data Workgroup, 1993-1996

Scientific Workshop Participant, Beyond Hunt Valley: Research on Women's Health for the 21st Century, Bone and Musculoskeletal Workgroup, Bethesda, Maryland, 1997

National Arthritis Action Plan Working Group, 1997-1998

Food and Drug Administration Special Government Consultant for Rheumatic Diseases, 1998-2000

NIAMS Committee-Long Range Planning Workgroup, 1999

Decade of Bone and Joint Disease Burden of Illness Task Force, 2000

International

Decade of Bone and Joint Disease Burden of Musculoskeletal Conditions Working Group, 2000

Arthritis Foundation National

Board of Trustees, 1989-2000
House of Delegates, 1989-2000
Senior Vice Chair, 1999-2000
Treasurer, 1997-1998
Vice Chair, Metro 2, 1995-1996
Editorial Board, 1995-1996
Corporate Promotions Review Panel
 Chair, 1995-1998
Government Affairs Committee
 Chair, 1994-1995
 Vice Chair, 1992-1993
 Member, 1988-1989
 Advocacy subcommittee, 1994-1996
Health Care Reform Task Force, 1993
Quality of Life Task Force, 1992-1993
Blue Ribbon Quality of Life Committee, 1997, 1998
Patient and Community Service Committee's Evaluation Task Force, 1994-1996
Finance Committee, 1989, 1997, 1998
 Investment Subcommittee, 1998
 Audit Subcommittee, 1997, 1998
Committee on Committee Appointments, 1989-1990, 1997-2000
Nominating Committee, 1990, 1993
Salary and Personnel Committee, 1990, 1997-2000
Public Health Task Force, 1997-1998
National Meeting Planning Committee
 Chair, 1992
 Member, 1991, 1994
Task Group on Service Areas, 1992-1993
Witness to the House Appropriations Committee on behalf of increased funding for NIAMS, April 26, 1989.
Witness to the Senate Appropriations Committee on behalf of increased funding for NIAMS, March 28, 1990.
Volunteer for National Health Council's Medical Research Advocacy Campaign, 1988
Medical Spokesperson, 1998-2000
Cost and Access to Medications Think Tank, 1999
Consultant to New York Chapter's NAAP Committee, 1999-2000
Consultant and Advisor for Arthritis Today articles

Arthritis Foundation – Tennessee Chapter

Board of Trustees, 1993-1995
Past-Chair, 1995
Chair, 1994
Senior Vice Chair, 1993
Executive Committee, 1993-1995
 Chair, 1993
 Member, 1994
Long Range Planning Committee
 Chair, 1993
 Member, 1994, 1995
Government Affairs Committee, 1993-1995
Budget and Finance Committee, 1993-1994

Personnel Committee, 1993-1994
Nominating Committee
Chair, 1995
Member, 1994

Arthritis Foundation – Middle-East Tennessee Chapter

Board of Trustees, 1989-1992
Senior Vice Chair, 1991-1992
Vice Chair, 1990
Government Affairs Committee Chair, 1989-1992
Executive Committee, 1989-1992
NIAMS Campaign Chair, 1990
Nominating Committee Chair, 1991
Tennessee Consolidation Committee, 1991-1992
*Nashville Branch
Board of Directors, 1989-1992
Executive Committee, 1989-1992

Arthritis Foundation – Georgia Chapter

Government Affairs Committee, Chair, 1994-1995
Board of Directors, 1995

Arthritis Foundation – Carolinas Chapter

Board of Directors, 1995-1999
Government Affairs Committee, 1997, 1998
Breakthrough Discovery Committee, 1997, 1998
President's Search Committee, 2000
*Eastern Branch
Council Member, 1995-1999
Hope Valley Golf Tournament Committee, 1996, 1997, 1998
Celebrity Waiter Night Committee, 1996, 1997
~~_____~~
Lifetime Achievement Dinner Committee, 1997, 1998, 1999

STUDENTS, FELLOWS, AND TEACHING RESPONSIBILITY

Supervisor, Arthritis Foundation Dissertation Grant for _____, MPH, Doctoral Candidate, Department of Epidemiology, School of Public Health, University of North Carolina, 1997-1999

Co-advisor and committee member for _____ PT, MS, Doctoral Candidate, Department of Health Behavior and Health Education, School of Public Health, University of North Carolina, 1997-2000

Sponsor, NIH Predoctoral Fellowship Program Award for _____ PT, MS, 1998-1999

Supervisor/Sponsor for Arthritis Foundation Young Investigator Award for _____ MD, 1998-1999

Supervisor for Institute on Aging Doctoral Student Award for _____ PT, MS, 1998-1999

Supervisor, Arthritis Foundation Dissertation Grant for _____ PT, MS, 1999-2001

Aging and Health Course
Co-director, 1998-1999
Director, 2000

PUBLICATIONS – Original Articles – all peer reviewed

1. Alberto BP, **Callahan LF**, Pincus T. Evidence that retrovirus expression in mouse spleen cells result from B cell differentiation. *J Immunol.* 1982;129:2768-772.
2. Pincus T, **Callahan LF**, Sale WG, Brooks AL, Payne LE, Vaughn WK. Severe functional declines, work disability, and increased mortality in seventy-five rheumatoid arthritis patients studied over nine years. *Arthritis Rheum.* 1984;27:864-872.
3. Nicassio PM, Wallston KA, **Callahan LF**, Herbert M, Pincus T. The measurement of helplessness in rheumatoid arthritis: the development of the Arthritis Helplessness Index. *J Rheumatol.* 1985;12:462-467
4. Pincus T, **Callahan LF**. Formal education as a marker for increased mortality and morbidity in rheumatoid arthritis. *J Chron Dis.* 1985;38:973-984.
5. Nance EP, Kaye JJ, **Callahan LF**, Carroll FE, Winfield AC, Earthman WJ, Phillips KA, Fuchs HA, Pincus T. Observer variation in quantitative assessment of rheumatoid arthritis. I. Scoring erosions and joint space narrowing. *J Invest Radiol.* 1986;21:922-927.
6. Pincus T, **Callahan LF**, Bradley LA, Vaughn WK, Wolfe F. Elevated MMPI scores for hypochondriasis, depression and hysteria in patients with rheumatoid arthritis reflect disease rather than psychological status. *Arthritis Rheum.* 1986;29:1456-1466.
7. Kaye JJ, Nance EP, **Callahan LF**, Carroll FE, Winfield AC, Earthman WJ, Phillips KA, Fuchs HA, Pincus T. Observer variation in quantitative assessment of rheumatoid arthritis. II. A simplified scoring system. *J Invest Radiol.* 1987;22:41-46.
8. Kaye JJ, **Callahan LF**, Nance EP, Brooks R, Pincus T. Bony ankylosis in rheumatoid arthritis: Associations with longer duration and greater severity of disease. *J Invest Radiol.* 1987;22:303-309.
9. Pincus T, **Callahan LF**, Vaughn WK. Questionnaire, walking time and button test measures of functional capacity as predictive markers for mortality in rheumatoid arthritis. *J Rheumatol.* 1987;14:240-251.
10. Olsen NJ, **Callahan LF**, Pincus T. Immunologic studies of rheumatoid arthritis patients treated with methotrexate. *Arthritis Rheum.* 1987;30:481-488.
11. **Callahan LF**, Brooks RH, Summey JA, Pincus T. Quantitative pain assessment for routine care of rheumatoid arthritis patients, using a pain scale based on activities of daily living and a visual analog pain scale. *Arthritis Rheum.* 1987;30:630-636.
12. Pincus T, **Callahan LF**, Burkhauser RV. Most chronic diseases are reported more frequently by individuals with fewer than 12 years of formal education in the age 18-64 United States population. *J Chron Dis.* 1987;40:865-874.
13. Kaye JJ, **Callahan LF**, Nance EP, Brooks RH, Pincus T. Rheumatoid arthritis: explanatory power of specific radiographic findings for patient clinical status. *Radiology.* 1987;165:753-758.
14. Fuchs HA, **Callahan LF**, Kaye JJ, Brooks RH, Nance EP, Pincus T. Radiographic and joint count findings of the hand in rheumatoid arthritis. Related and unrelated findings. *Arthritis Rheum.* 1988;31:44-51.
15. Olsen NJ, **Callahan LF**, Brooks RH, Nance EP, Kaye JJ, Stastny P, Pincus T. Associations of HLA-DR4 with rheumatoid factor and radiographic severity in rheumatoid arthritis. *Am J Med.* 1988;84:257-264.

16. **Callahan LF**, Brooks RH, Pincus T. Further analysis of learned helplessness in rheumatoid arthritis using a "Rheumatology Attitudes Index". *J Rheumatol*. 1988;15:418-426.
17. Brooks RH, **Callahan LF**, Pincus T. Use of self-report activities of daily living questionnaires in osteoarthritis. *Arthritis Care Res*. 1988;1:23-32.
18. Olsen NJ, **Callahan LF**, Pincus T. In vitro rheumatoid factor synthesis in patients taking second-line drugs for rheumatoid arthritis: Independent associations with disease activity. *Arthritis Rheum*. 1988;31:1090-1096.
19. **Callahan LF**, Pincus T. Formal educational level as a significant marker of clinical status in rheumatoid arthritis. *Arthritis Rheum*. 1988;31:1346-1357.
20. Pincus T, **Callahan LF**, Brooks RH, Fuchs HA, Olsen NJ, Kaye JJ. Self-report questionnaire scores in rheumatoid arthritis compared with traditional physical, radiographic, and laboratory measures. *Ann Intern Med*. 1989;110:259-266.
21. Fuchs HA, Brooks RH, **Callahan LF**, Pincus T. A simplified 28-joint quantitative articular index in rheumatoid arthritis. *Arthritis Rheum*. 1989;32:531-537.
22. Fuchs HA, Kaye JJ, **Callahan LF**, Nance EP, Pincus T. Evidence of significant radiographic damage in rheumatoid arthritis within the first two years of disease. *J Rheumatol*. 1989;16:585-591.
23. Pincus T, **Callahan LF**. Clinical use of multiple nonsteroidal anti-inflammatory drug preparations within individual rheumatology private practices. *J Rheumatol*. 1989;16:1253-1258.
24. **Callahan LF**, Smith WJ, Pincus T. Self-report questionnaire in five rheumatic diseases: Associations with formal education level. *Arthritis Care Res*. 1989;2:122-121.
25. Engle EW, **Callahan LF**, Pincus T, Hochberg MC. Learned helplessness in systemic lupus erythematosus: analysis using the Rheumatology Attitudes Index. *Arthritis Rheum*. 1990;33:281-286.
26. **Callahan LF**, Pincus T. Associations between clinical status questionnaire scores and formal education level in persons with systemic lupus erythematosus. *Arthritis Rheum*. 1990;33:407-411.
27. Kaye JJ, Mosley JW, Nance EP, Fuchs HA, **Callahan LF**, Pincus T. Problems with Steinbrocker staging system for the rheumatoid hand and wrist. *J Invest Radiol*. 1990;25:536-544.
28. **Callahan LF**, Pincus T. The P-VAS/D-ADL ratio: A clue from self report questionnaire to distinguish rheumatoid arthritis from non-inflammatory diffuse musculoskeletal pain. *Arthritis Rheum*. 1990;33:1317-1322.
29. Kazis LE, **Callahan LF**, Meenan RF, Pincus T. Health Status reports in the care of patients with rheumatoid arthritis. *J Clinical Epid*. 1990;43:1243-1253.
30. Tanner SB, **Callahan LF**, Panush R, Pincus T. Dietary and allergic associations with rheumatoid arthritis: self-report of 704 patients. *Arthritis Care Res*. 1990;3:189-195.
31. **Callahan LF**, Kaplan MR, Pincus T. The Beck, CES-D and General Well-Being Depression Scale in rheumatoid arthritis: Criterion contamination of responses. *Arthritis Care Res*. 1991;4:3-11.
32. Pincus T, Brooks RH, **Callahan LF**. Reliability of grip strength, walking time, and button test performed according to a standard protocol. *J Rheum*. 1991;18:997-1000.
33. **Callahan LF**, Bloch D, Pincus T. Identification of work disability in rheumatoid arthritis: physical, radiographic and laboratory variables do not add explanatory power to demographic and functional variables. *J Clinical Epid*. 1992;45:127-138.

34. Pincus T, **Callahan LF**. Rheumatology Function Tests: Grip strength, walking time, button test and questionnaires document and predict long-term morbidity and mortality in rheumatoid arthritis. *J Rheum*. 1992;19:1051-1057.
35. **Callahan LF**, McCoy A, Smith WJ. Comparison and sensitivity to change of self-report scales to assess difficulty, dissatisfaction and pain in performing activities of daily living over one and five years in rheumatoid arthritis. *Arthritis Care and Res*. 1992;5:137-144.
36. Pincus T, Marcum SB, **Callahan LF**, Adams RF, Barber J, Barth WF, Gordon GV, Huston JW, Polk JR, Whelton JC, Brooks RH. Drug therapy for rheumatoid arthritis in seven rheumatology private practices: I. Nonsteroidal anti-inflammatory drugs. *J Rheum*. 1992;19:1874-1884.
37. Pincus T, Marcum SB, **Callahan LF**. Drug therapy for rheumatoid arthritis in seven rheumatology private practices: II. Second-line agents and prednisone. *J Rheum*. 1992;19:1885-1894.
38. DeVellis RF, **Callahan LF**. A brief measure of helplessness in rheumatic disease: the helplessness subscale of the rheumatology attitudes index. *J Rheum*. 1993;20:866-869.
39. Pincus T, Brooks RH, **Callahan LF**. Risk factors for mortality in rheumatoid arthritis over 5,10,and 15 years. *Ann Intern Med*. 1994;120:26-34.
40. **Callahan LF**, Pincus T. The sense of coherence scale in rheumatoid arthritis. *Arthritis Care Res*. 1995;8:28-35.
41. Yelin E, **Callahan LF**. The economic cost and social and psychological impact of musculoskeletal conditions. *Arthritis Rheum*. 1995;38:1351-1362.
42. **Callahan LF**, Cordray DS, Wells G, Pincus T. Learned helplessness as a possible mediator of associations between formal education education and mortality in rheumatoid arthritis. *Arthritis Care Res*. 1996;9:463-472.
43. Rao J, **Callahan LF**, Helmick C. Characteristics of individuals with self-reported arthritis who do not see a physician. *J Rheum*. 1997;24:169-173.
44. Pincus T, Larsen A, Brooks RH, Kaye J, Nance EP, **Callahan LF**. Comparison of three quantitative measures of hand radiographs in rheumatoid arthritis: Steinbrocker Stage, Kaye Modified Sharp Score, and Larsen Score. *J Rheum*. 1997;24,11:2106-2112.
45. **Callahan LF**, Pincus T, Huston JW, Brooks RH, Nance EP, Kaye JJ. Measures of activity and damage in rheumatoid arthritis: Depiction of changes and prediction of mortality. *Arthritis Care and Res*. 1997;10,6:381-394.
46. Grubber J, **Callahan LF**, Helmick CG, Zack MM, Pollard RA. Prevalence of radiographic hip and knee osteoarthritis by place of residence. *J Rheum*. 1998;25:5 959-963.
47. Kruger J, Helmick CG, **Callahan LF**, Haddix A. Cost-effectiveness of the Arthritis Self-Help Course. *Archives Int Med*. 1998;58:1245-1249.
48. Pincus T, **Callahan LF**, Fuchs HA, Nance EP, Kaye JJ. Early radiographic joint space narrowing and erosion and later malalignment in rheumatoid arthritis: A longitudinal analysis. *J Rheum*. 1998;25,4:636-640.
49. DeRoos AJ, **Callahan LF**. Differences by gender in correlates of work status in rheumatoid arthritis patients. *Arthritis Care Res*. 1999;12:381-391.
50. Pincus T, Swearington C, Cummins P, **Callahan LF**. Preference for nonsteroidal anti-inflammatory drugs versus acetaminophen and concomitant use of both types of drugs in patients with osteoarthritis. *J Rheumatol*, in press, 1999.

51. Jordan J, Bernard S, **Callahan LF**, Kincade J, Konrad T, DeFries G. The paramount importance of sleep disruption in the utilization of medical care and complementary therapies for arthritis: The National Survey of Self-Care and Aging. *Arch Family Medicine*, 2000;9:143-149.
52. Jordan JM, Keysor J, **Callahan LF**, Renner JB, DeVellis RF, Hochberg M, Helmick CG. Physical disability among community-dwelling adults: the role of depressive symptoms, social support and knee pain. Submitted, 28 pages
53. Pincus T, Koch GG, Sokka T, Lefkowitz J, **Callahan LF**, Wolfe F, Abramson SB, Caldwell JR, Jordan JM, Harrell RA, Kremer JM, Lautzenheiser RL, Markenson JA, Schnitzer TJ, Weaver A, Cummins P, Wilson A, Morant S, Wang X, Schwartz T, Fort J. Superiority of diclofenac and misoprostol (arthrotec) compared to acetaminophen in treatment of osteoarthritis of the hip and knee. Submitted, 29 pages

PUBLICATIONS – Book Chapters, Reviews, Letters, Editorials, Commentaries (*=peer-reviewed)

1. Pincus T, **Callahan LF**, Brooks RH. Quantitative nonlaboratory measures to monitor and predict the course of rheumatoid arthritis. In: Ehrlich GE., ed. *Rehabilitation Management of Rheumatic Conditions*. Baltimore: Williams & Wilkins; 1986:45-63.
2. Ford CV, **Callahan LF**, Brooks RH, Nicassio PM, Pincus T. Psychological test results are not correlated with objective measures of function in rheumatoid arthritis. In: Lacey JH, Sturgeon DA., eds. *Proceedings of the 15th European Conference on Psychosomatic Research*. London: John Libbey; 1986:303-306.
3. Pincus T, **Callahan LF**. Taking mortality in rheumatoid arthritis seriously-predictive markers, socioeconomic status and comorbidity (editorial). *J Rheumatol*. 1986;13:841-845.
4. **Callahan LF**, Wolfe F, Pincus T. A contrasting view on rheumatoid arthritis (letter). *Am J Public Health*. 1989;79:1308.
5. Pincus T, **Callahan LF**. Reassessment of twelve traditional paradigms concerning the diagnosis, prevalence, morbidity and mortality of rheumatoid arthritis. *Scand J Rheum*. 1989;79:67-95.
6. Pincus T, **Callahan LF**. Rheumatoid arthritis (letter). *N Eng J Med*. 1990;17:1582-1585.
7. Pincus T, **Callahan LF**. Remodeling the pyramid or remodeling the paradigms concerning rheumatoid arthritis-lessons from Hodgkin's disease and coronary artery disease. *J Rheum*. 1990;17:1582-1585.
8. Pincus, T, **Callahan LF**. Mortality in rheumatoid arthritis. *Sandorama*. 1990;2:26-34.
9. **Callahan LF**. Arthritis Health Professions Association President's Address. *Arthritis Care Res*. 1991;4:1-2.
10. Li CQ, Baum SK, Bradley LA, Brown SA, **Callahan LF**, Alarcon GS, Martin R. Arthritis Care and Research: A quality/needs assessment. *Arthritis Care and Res*. 1991;4:141-142.
11. Pincus T, **Callahan LF**. Quantitative measures to assess, monitor and predict morbidity and mortality in rheumatoid arthritis. In: Scott DL, ed. *The Course and Outcome of Rheumatoid Arthritis*. Bailliere's Clinical Rheumatology. Vol. 6:1, 1992.
12. * Pincus T, **Callahan LF**. Early mortality in rheumatoid arthritis is predicted by poor clinical status. *Bulletin of Rheumatic Disease*. 1992;41:4; 1-4.
13. Pincus T, **Callahan LF**. Mortality in rheumatoid arthritis: prediction by poor clinical status. In: Balint G, Gomer B, Hodinka L, eds. *Rheumatology, State of the Art, Proceedings of the XIIth European Congress of Rheumatology*. Amsterdam: Elsevier Science Publishers; 1992:234-237.

14. Pincus T, **Callahan LF**. What is the natural history of rheumatoid arthritis? Controversies in clinical rheumatology. *Rheumatic Disease Clinics of North America*. Vol. 19:123-151, 1993.
15. Pincus T, **Callahan LF**. The "side effects" of rheumatoid arthritis: Joint destruction, disability, and early mortality. *British J Rheumatol*. 1993;32 (supl):28-37.
16. Pincus T, **Callahan LF**. Variability in individual responses of 532 patients with rheumatoid arthritis to first-line and second-line drugs. *Agents and Actions [suppl]*, 1993;44:67-75.
17. Pincus T, **Callahan LF**. Depression scales in rheumatoid arthritis: Criterion contamination in interpretation of patient responses. *Patient Education and Counseling*. 1993;20:133-143.
18. Brady T, Boudaugh M, **Callahan LF**, Gibofsky A, Haralson K, Lappin D, Lautzenheizer R, Leong A, McAsey P, Rutkowski R. Quality of Life Action Plan. *Arthritis Foundation, Atlanta GA* 1993, 5 pages
19. Pincus T, **Callahan LF**. Explaining the connection between privilege and health (letter). *N Engl J Med*. 1994;297-316.
20. **Callahan LF**. Socioeconomic status and the outcome of rheumatoid arthritis. In: Wolfe F, Pincus T, eds. *Prognosis and treatment of rheumatoid arthritis*. New York: Marcel Dekkar; 1994;297-316.
21. Pincus T, Wolfe F, **Callahan LF**. Introduction: Updating a reassessment of traditional paradigms concerning rheumatoid arthritis. In: Wolfe F, Pincus T, eds. *Prognosis and treatment of rheumatoid arthritis*. New York: Marcel Dekkar; 1994:1-74.
22. Pincus T, **Callahan LF**. Associations of low formal education level and poor health: Behavioral, in addition to medical explanations? *J Clin Epidemiol* 1994;47:355-361.
23. Pincus T, **Callahan LF**. How many types of patients meet classification criteria for rheumatoid arthritis? *J Rheumatol* 1994;21:1385-1389.
24. Pincus T, **Callahan LF**. What explains the association between socioeconomic status health: primarily access to medical care or mind-body variables? *Advances* 1995;11 no.1:4-36.
25. Rao JK, **Callahan LF**. Systems for data analysis. *Rheumatic Disease Clinics of North America* 1995;21:359-378.
26. Pincus T, **Callahan LF**. Prognostic markers of activity and damage in rheumatoid arthritis: why clinical trials and inception cohort studies indicate more favourable outcomes than studies of patients with established disease. *British J Rheum*, 1995;34:196-197.
27. * **Callahan LF**. Awareness of the prevalence and impact of arthritis: the role of health professionals. *Arthritis Care and Res*. 1995;8:63-65.
28. CDC (Rao JK, **Callahan LF**, Helmick C, Pollard R). Prevalence and impact of arthritis in women – United States, 1989-1991 *MMWR* 1995;44:329-334.
29. Pincus T, **Callahan LF**. Reply to letters regarding "How many types of patients meet classification criteria?" *J Rheumatol* 1995;22:1435-1436.
30. Pincus T, **Callahan LF**. Response to comments regarding "Are mind-body variables a central factor linking socioeconomic status and health? *Advances*, 1995;11 no.3:29-31.
31. * **Callahan LF**, Yelin E. The transition to managed care: implications for the rheumatology community. *Arthritis Care Res*, 1995;8:129-131.

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INVITED TALKS

1. New realities of rheumatologic practice—Examination of Physician Capitation Packages in Terms of Rheumatoid Arthritis, Fifth Annual South—east Regional Rheumatology on the Beach, October 8-11, 1987, Destin, FL.
2. Capitation and Relative Value Scales – Reimbursement and Arthritis, ARAMIS Databank Network Symposium, March 19-21, 1988, Stanford University, Palo Alto, CA.
3. Barriers to Providing Patient Education: Is Financing a Problem? –Impact of Capitation and Bundling of Services on Rheumatoid Arthritis, National Arthritis Advisory Board Conference on Financing Patient Education in Arthritis and Musculoskeletal and Skin Diseases, March 23-24, 1988, Atlanta, GA.
4. Current Issues in Rheumatic Disease Assessment, 24th Annual AHPA Meeting, State of the Art in Clinical Assessment, June 11, 1989, Cincinnati, OH.
5. Capitation Versus Fee for Service Debate, 24th Annual AHPA Meeting, June 12-17, 1989, Cincinnati, OH.
6. Quality of Life in Rheumatoid Arthritis, Osteoarthritis, Systemic Lupus Erythematosus, Fibromyalgia and Scleroderma, X Pan American Congress of Rheumatology, March 12, 1990, Guadalajara, Mexico.

7. Assessment of Learned Helplessness, Sense of Coherence, Optimism, and Coping Strategies in Rheumatoid Arthritis. Symposium on Psycho-social Aspects of Rheumatic Diseases: Assessment Procedures, Coping Strategies and Self-efficacy, June 6, 1990, Enschede, The Netherlands.
8. Formal Education Level as a Marker Frequency, Morbidity and Mortality in Rheumatoid Arthritis and Most other Chronic Diseases. Third International Symposium for Health Professionals in Rheumatology, June 6-9, 1990, Enschede, The Netherlands.
9. Socioeconomic Variables as Predictive Markers of Morbidity and Mortality. Rheumatology Symposium for Health Professionals, September 26-29, 1990, Oslo, Norway.
10. Health Self-perception and Measures of Psychological Health Status. Rheumatology Symposium for Health Professionals, September 26-29, 1990, Oslo, Norway.
11. Formal Education Behavioral Variables, and Outcomes in Rheumatoid Arthritis, Rheumatology Grand Rounds, University of North Carolina, January 24, 1991, Chapel Hill, NC.
12. Measurement and Assessment of the Arthritis Patient. Arthritis Rehabilitation Update, October 12, 1991, Louisville, KY.
13. Measures of Helplessness/Hopelessness. Social and Behavioral Scientists Council. National AHPA Meeting, November 17-21, 1991, Boston, MA.
14. Analysis of Longitudinal Data with Multiple Visits or Determinations. Clinical Epidemiology Study Group, National ACR Meeting, October 12, 1992, Atlanta, GA.
15. Socioeconomic Status and Arthritis. Centers for Disease Control and Prevention, November 23, 1992, Atlanta, GA.
16. Why Should Formal Education Predict Mortality? An Evaluation of Mediation Processes. Department of Preventive Medicine Conference, Vanderbilt University, January 18, 1993, Nashville, TN.
17. Socioeconomic Status and Health Status: Mechanisms and Implications for Health Policy. Southeast Region American College of Rheumatology Meeting, March 27, 1993, Arlington, VA.
18. Health Care Reform 1993. Arthritis Foundation Board of Trustees Meeting, May 1, 1993, Baltimore, MD.
19. Health Care Reform Update. Arthritis Foundation House of Delegates Meeting, November 5, 1993, Atlanta, GA.
20. Managed Competition. National AHPA Meeting, November 7-11, 1993, San Antonio, TX.
21. Writing a Scientific Paper- Meet the Expert. National AHPA Meeting, November 7-11, 1993, San Antonio, TX.
22. Socioeconomic Status and Health Status Outcomes in Arthritis. Eighth National Conference on Chronic Disease Prevention and Control. November 17-19, 1993, Kansas City, MO.
23. Formal Education and Five Year Mortality in Rheumatoid Arthritis—Learned Helplessness and Pain Scores as Potential Mediators. University of Ottawa Clinical Epidemiology Unit Rounds. January 14, 1994, Ottawa, Canada.
24. The CDC Arthritis Program. ARAMIS Symposium. March 19, 1994, Palo Alto, CA.
25. Social-Psychological Issues Workshop. ARAMIS Symposium. March 20, 1994, Palo Alto, CA.
26. Predictors of Mortality in Rheumatoid Arthritis. Emory University Rheumatology Conference. March 30, 1994, Atlanta, GA.

27. Socioeconomic Status and Outcomes in Rheumatic Disease. Emory University Rheumatology Conference. April 13, 1994, Atlanta, GA.
28. Aging and Culture Workshop. American Anthropological Association Annual Meeting. December 1, 1994, Atlanta, GA.
29. Principles of Epidemiology. Emory University Rheumatology Conference. April 12, 1995, Atlanta, GA.
30. Epidemiology and Outcomes of Rheumatic Disease- What Will the Future Hold? Southeast Region American College of Rheumatology Meeting. April 30, 1995, Philadelphia, PA.
31. Epidemiology and Outcomes of Rheumatic Disease. Texas Rheumatism Association Annual Meeting. May 13, 1995, League City, TX.
32. Epidemiology and Impact of Rheumatic Diseases. Preventive Medicine Research Conference. Vanderbilt University, May 15, 1995, Nashville, TN.
33. Patient Education as a Potential Modifier of Behavioral Mediators Affecting Outcomes in Rheumatic Diseases. XIIIth European Congress of Rheumatology. June 19, 1995, Amsterdam, The Netherlands.
34. What's Happening with *Arthritis Care & Research*? American College of Rheumatology\Association of Rheumatology Health Professionals National Scientific Meeting. October 26, 1995, San Francisco, CA.
35. The Skyrocketing Economic Impact of Arthritis. American Medical Association Press Briefing, Arthritis: The Chronic Care Challenge of the 21st Century, November 16, 1995, New York, NY.
36. The Economics of Arthritis. Arthritis Consultants Meeting. December 16, 1995, Orlando, FL.
37. The Epidemiology and Impact of Arthritis in the United States and North Carolina. Arthritis Foundation Carolinas Chapter Annual Meeting. January 11, 1996, Greensboro, NC.
38. Epidemiology and Impact of Arthritis. Rheumatology Grand Rounds. Hospital for Special Surgery. March 6, 1996.
39. Psychological Measures and Morbidity/Mortality. OMERACT III Meeting, April 19, 1996, Cairns, Australia.
40. Pharmacoeconomic Implications of Treating Rheumatoid Arthritis at an Early Stage. Controlling Progression of Severe Rheumatoid Arthritis Symposium, 8th APLAR Congress, April 22, 1996, Melbourne Australia.
41. Rheumatic Disease and Women's Health. University of Missouri Press Briefing, Arthritis and Women's Health, April 29, 1996, Washington, DC.
42. Response to Barriers to Care Talk. Institute of Medicine's Workshop on Changing Health Care Systems and Rheumatic Disease, May 15, 1996, Washington, DC.
43. Socioeconomic Factors and Their Impact on Systemic Lupus Erythematosus. National Medical Association Rheumatology Symposium, July 29, 1996, Chicago, IL.
44. Economic and Psychosocial Factors in Rheumatic Disease. National SveReFo Meeting, September 12, 1996, Malmo, Sweden.
45. Epidemiology and Impact of Arthritis. University of North Carolina Medical Grand Rounds, September 19, 1996, Chapel Hill, NC.

66. The Prevention of Disability Associated with Arthritis. Carolina Meadows, April 9, 1999, Chapel Hill NC.
67. National Arthritis Action Plan-A Public Health Strategy. International Longevity Center, April 12, 1999, New York NY.
68. Measures of Arthritis and Damage in Rheumatoid Arthritis. Australian Rheumatology Association 42nd Annual Scientific Conference, May 23, 1999, Perth Australia.
69. The Impact and Costs of Rheumatic Diseases. The Rheumatology Health Professionals Association, May 23, 1999, Perth Australia.
70. The Use of Outcome Measures in the Clinic. Australian Rheumatology Association 42nd Annual Scientific Conference, May 26, 1999, Perth Australia.
71. Morbidity and Mortality in Rheumatoid Arthritis. University of Virginia. July 7, 1999, Charlottesville, VA.
72. The Growing Popularity of Alternative Therapies Among Older Adults, North Carolina Summer Symposium on Aging, July 22, 1999, Fayetteville, NC.
73. Social Conditions and Self-Management are more Powerful-Determinants of Health Than Access to Care. Grand Rounds, Hospital for Special Surgery, September 24, 1999, NY, New York.
74. Socioeconomic Status and Health Outcomes. Living Legends, October 1999, Chapel Hill, NC.
75. Alternative Therapy Use in Older Adults, Chapel Hill Senior Center, November 1999, Chapel Hill, NC.
76. Epidemiology of Rheumatic Diseases. ARHP Rheumatology Practice Course. November 13, 1999, Boston, MA.
77. Getting an Article Published. Meet the Expert Session-ARHP Conference, November 15, 1999, Boston, MA.
78. From My Perspective. Arthritis Foundation Leadership Meeting. February 3, 2000, Atlanta, GA.
79. Arthritis as a Women's Health Issue. Richmond Memorial Hospital, March 7, 2000, Rockingham, NC.
80. Social Conditions and Self-Management are more Powerful-Determinants of Health Than Access to Care. Grand Rounds, Hospital for Special Surgery, April 6, 2000, NY, New York.
81. Surveillance, Research and Epidemiology. Arthritis Symposium: A Multidisciplinary Approach, June 1, 2000, Raleigh, NC.
82. Socioeconomic and Racial Differences in Health in Arthritis. North Carolina Summer of Aging Symposium, July 12, 2000, Asheville, NC.

AWARDS

Outstanding Abstract presented at the Sixth Southeastern Regional Meeting of the AHPA, December 9-10, 1983, Lake Buena Vista, FL.

Outstanding Abstract presented at the Eleventh Southeastern Regional Meeting of the AHPA, December 1-3, 1988, Tampa, FL.

Middle-East Tennessee Chapter Arthritis Foundation Distinguished Service Award for work on Government Affairs, 1989.

Arthritis Foundation Certificate of Appreciation for Outstanding efforts on behalf of the "Arthritis Research for a New Age" Campaign, April 24, 1990.